

GP-302628

ASSEMBLY OF MODULAR ENGINE

ABSTRACT OF THE DISCLOSURE

This invention provides a method of assembling a modular internal combustion engine. The modular engine includes a cast crankcase having an open top and a closed bottom, a mid-plate, and an extruded cylinder bore block. A pre-assembled crankshaft with bearings, connecting rods, and pistons with piston rings are all placed through the open top crankcase. The mid-plate partially houses the assembled components over top the crankcase as the connecting rods and pistons extend through and above. Next, the piston rings are simultaneously compressed and the cylinder block is located over the pistons. The pistons with piston rings are inserted into cylinder bores through the bottom surface of the cylinder block and the assembly is completed. This method is performed with the help of a fixture for compressing and positioning the piston rings.